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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/563,911	01/10/2006	Matti Lahtinen	1503-0187PUS1	5631	
2502 ASTRUCTURE AND ASTRUCTURE AS			EXAM	EXAMINER	
			CARTER, WILLIAM JOSEPH		
			ART UNIT	PAPER NUMBER	
			NOTIFICATION DATE	DELIVERY MODE	
			05/14/2009	ELECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Application No. Applicant(s) 10/563,911 LAHTINEN, MATTI Office Action Summary Examiner Art Unit WILLIAM J. CARTER 2875 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 29 January 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-3.5.6 and 11 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-3,5,6 and 11 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 21 July 2008 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/S5/08)
Paper No(s)/Mail Date \_\_\_\_\_\_

Attachment(s)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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#### DETAILED ACTION

#### Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the resistor of claim must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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### Claim Rejections - 35 USC § 112

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 12, providing a dimension in parentheses renders the claim indefinite because it is unclear whether the limitation(s) in parentheses are part of the claimed invention. See MPEP § 2173.05(d).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1-3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanley (6,733,150)

With respect to claim 1, Hanley teaches a light-emitting diode illuminator (800) for a headgear (801) with a visor (808), the illuminator comprising: a light-emitting diode module (830) including a plurality of light-emitting diodes (832) arranged as a unitary module (Fig. 8); a frame (801), an electronics control part (850) for controlling the light-emitting diode (832), the electronic control part including a switch (866), and a resistor controlling each light-emitting diode (Fig. 7), wherein the light-emitting diodes are directed in a given direction or directions (Fig. 8), wherein the light emitting diodes are

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fitted in the frame, side by side adjacent to each other and directed towards the given direction or directions (Fig. 8), wherein the switch is coupled to the frame (Fig. 8), and wherein the switch is adapted to vary the lighting efficiency of the illuminator (column 6, lines 10-19). Hanley does not explicitly teach the switch is arranged integrally to the frame, but it would have been obvious to one of ordinary skill in the art, at the time of the invention, to make the switch (46) and (12) integral, since it has been held that making an old device integral without producing any new and unexpected result involves only routine skill in the art. In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965). It would have been obvious to make the switch and frame integral, in order to make the device more durable and of fewer parts.

As for claim 2, Hanley further teaches the light-emitting diode module (830) is provided with ultraviolet (UV) LEDs so that at least one so the LEDs are UV LEDs (column 5, lines 33-47)

As for claim 3, Hanley further teaches the light-emitting diode module (830) is also provide with infrared (IR) LEDs so that at least some of the LEDs are IR LEDs (column 5, lines 33-47).

As for claim 5, Hanley further teaches the illuminator is a water-tight encapsulated LED unit (1808).

As for claim 6, Hanley further teaches different and differently color light-emitting diodes which work either together or separately (column 5, lines 33-47).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanley in view of Lee (2002/0021566).

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With respect to claim 11, Hanley teaches all of the claimed elements, as discussed above, except for explicitly teaching the light emitting diode module includes a rectangular module frame outside of the frame, and the light-emitting diodes are disposed within the module frame. Lee, also drawn to LED illuminators for headgear with a visor, teaches a light emitting diode module (14) includes a rectangular module frame (144) outside (via 142) of a frame (141), and a light-emitting diode(Abstract) disposed within the module frame (Fig. 12). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the rectangular module frame of Lee in the LED illuminator of Hanley, in order to allow for aiming of the LED module (Fig. 12).

### Response to Arguments

Applicant's arguments with respect to claims 1-3, 5, 6, and 11 have been considered but are moot in view of the new ground(s) of rejection. The Applicant has amended claim 1 to add a light-emitting diode module including a plurality of LEDs arranged as a unitary module. Because of the amendment, the primary reference for the rejection of the claims has been changed from Becker to Hanley.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. CARTER whose telephone number is (571)272-0959. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571)272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sandra L. O'Shea/ Supervisory Patent Examiner, Art Unit 2875

wjc 5/6/09